AT RISK REGISTRY

Hospital User Guide

The At Risk Registry is a service provided by mumms© Software for the management of hospital patients requiring assistance during an emergency. This user guide is intended for the primary users in hospitals.

At Risk Registry
PURPOSE OF THE APPLICATION

The evacuation of hospital patients is a critical function of ESF 8 during an event. Due to geographic considerations, types of assets needed, and the large number of organizations involved, this operation is extremely complex and lasts long after the event is over. The need to repatriate patients from evacuation sites back home or back to the evacuating hospital can last over a month after normal response activities have finished. This complexity can easily lead to confusion when the decision-makers and those embedded in the actual operation do not have accurate and timely information. The purpose of this project is to improve the quality of the information generated in the process and in doing so, to improve the process itself.

The current Medical Institution Evacuation Plan (MIEP) operation is characterized as a "14 step" process. It is actually a 37-step process that involves approximately 10 different versions of the same basic information – a list of patients. Two other major characteristics of the process include:

1. The use of email as the primary means of communication between stakeholders. In addition, the process relies on a non-secure, public email service to transfer and store patient information.
2. The use of spreadsheets as the primary "container" for information. Because this is not a single database, the result is the proliferation of spreadsheets at every point in the process; all having different information. Manipulation of the data is highly susceptible to errors due to the lack of data integrity.

As with all complex processes, improvement is always possible, and the revision of this process is not done lightly. The complexity of the current process is dependent on large numbers of people understanding and agreeing to the way things are done. An argument could be made that any changes to the way information is handled has the danger of introducing major disruptions. The answer to the argument is that improvement in the way information is managed will decrease the probability of failure at every point in the process.

This project is intended to deploy a method and a system for managing patient information related to the MIEP. The effort involves the use of a technology platform developed for the Louisiana/Mississippi Hospice and Palliative Care Association (LMHPCA) to manage hospice organization patients during an emergency. The application was developed by Secure Computing (SC) in New Orleans. In order to meet the needs of the MIEP process, SC has signficantly enhanced the structure and functionality of the system.

The characteristics of the system include the following:

1. It is a secure, web-based application.
2. Hospitals can upload (or enter) patient lists before an event and maintain data about patient status and evacuation needs.
3. Depending upon login identity, the user has customized views of the data based on his/her role in the process.
4. The application can quickly and easily generate the spreadsheets required by GPMRC to manifest patients for evacuation (GPMRC can use this application if desired; eliminating several steps in the process).
5. Patients can be tracked at every step of the process.
6. Secure Computing can automatically and securely transmit database extracts to the DHH Data Warehouse to facilitate more robust reporting and presentations.

In summary, Secure Computing has provided a platform on which the MIEP process can be streamlined and improved, enabling all stakeholders to have a unique view into the evacuation and repatriation process. Because of the advantages of the new database platform and structure, the hospice and home health functionality will soon be migrated over to this platform. This brings a new level of true process and information management to local and state ESF 8 stakeholders.
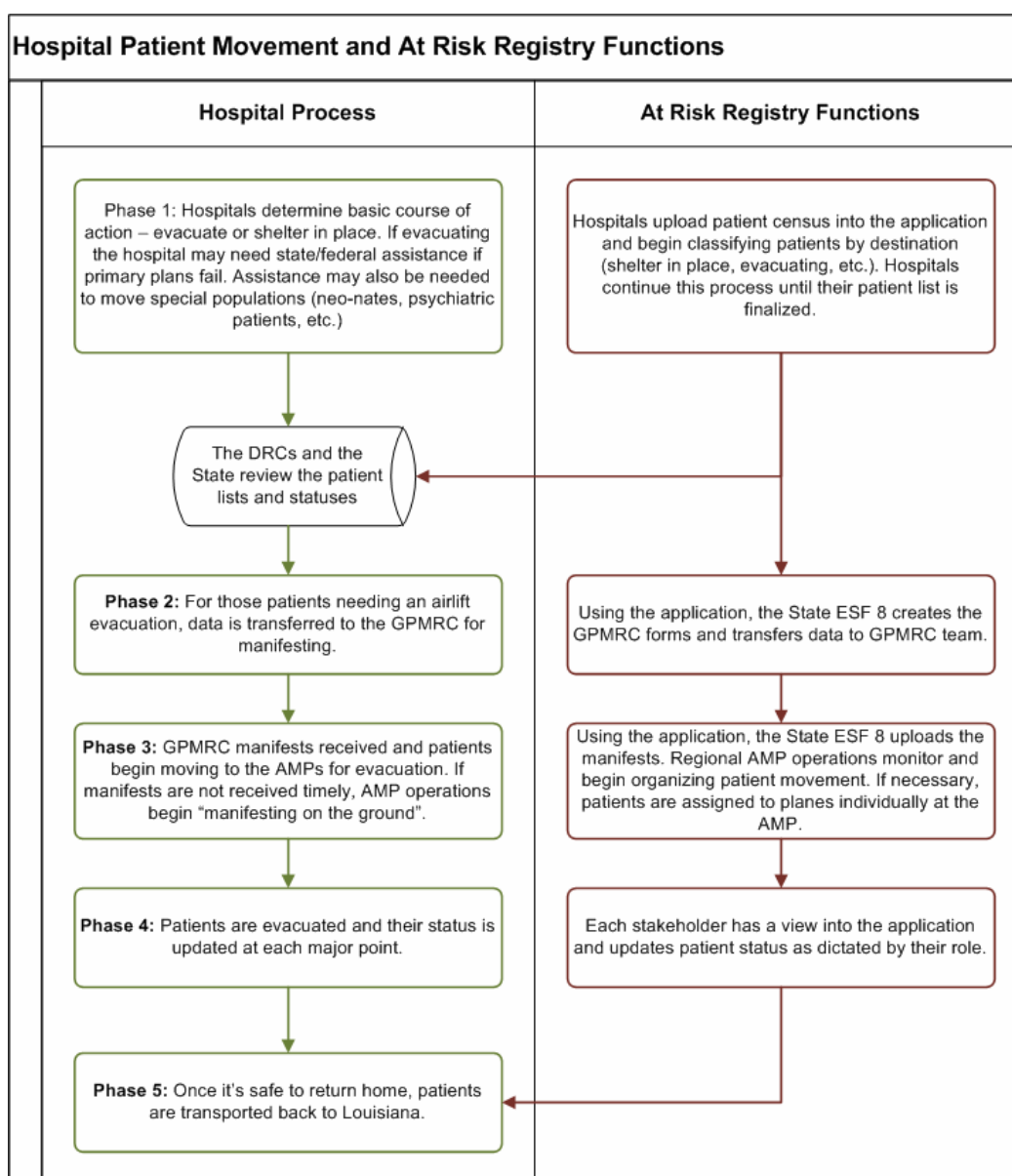
At Risk Registry
OVERALL PROCESS

From a hospital's perspective, the overall use of the At Risk application is very simple:

1. Upload or enter patient information;
2. Update patient evacuation statuses; and
3. Monitor the process through repatriation.

The following chart summarizes the major hospital functions and the corresponding uses of the application:

Hospital Patient Movement and At Risk Registry Functions

Hospital Process	At Risk Registry Functions
Phase 1: Hospitals determine basic course of action – evacuate or shelter in place. If evacuating the hospital may need state/federal assistance if primary plans fail. Assistance may also be needed to move special populations (neo-nates, psychiatric patients, etc.)	Hospitals upload patient census into the application and begin classifying patients by destination (shelter in place, evacuating, etc.). Hospitals continue this process until their patient list is finalized.
The DRCs and the State review the patient lists and statuses	
Phase 2: For those patients needing an airlift evacuation, data is transferred to the GPMRC for manifesting.	Using the application, the State ESF 8 creates the GPMRC forms and transfers data to GPMRC team.
Phase 3: GPMRC manifests received and patients begin moving to the AMPs for evacuation. If manifests are not received timely, AMP operations begin "manifesting on the ground".	Using the application, the State ESF 8 uploads the manifests. Regional AMP operations monitor and begin organizing patient movement. If necessary, patients are assigned to planes individually at the AMP.
Phase 4: Patients are evacuated and their status is updated at each major point.	Each stakeholder has a view into the application and updates patient status as dictated by their role.
Phase 5: Once it's safe to return home, patients are transported back to Louisiana.	

FIRST STEPS

The first step in the process is the establishment of an "event." This will be done by Secure Computing staff, and it essentially creates a "container" for all of the patient and other data associated with the event. Secure Computing will establish the event in the application in consultation with the State ESF 8 incident command structure.

Once the event has been created in the database, LHA, through a variety of means, will notify the DRC network and hospitals throughout the state of the creation of the event. This can trigger several actions:

1. Hospitals can begin to prepare patient lists for potential uploading into the application. This preparation can happen in several ways:
    a. The hospital can use it's A/D/T system to generate a compliant file that can be uploaded to the application.
    b. The hospital can create a compliant file through several means; or
    c. The hospital can enter patients directly into the application.

    Hospitals that upload patient lists will be notified of any errors that are encountered in the process. This eliminates an "all or nothing" approach. Correct data will be uploaded giving hospitals the opportunity to correct mistakes through direct data entry or re-uploading of correct data.

2. The application will be accessed through several means giving the user the opportunity to securely login to the site:
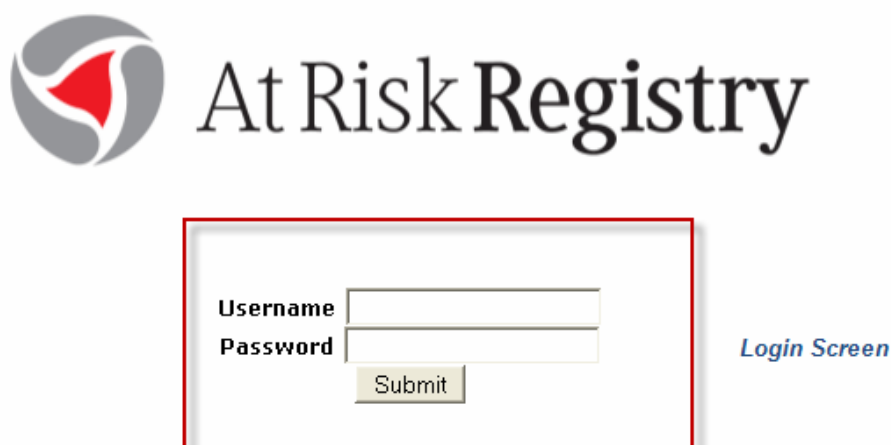
Secure Computing will work with DHH and LHA to ensure that login assistance is available during the initial part of the event timeline.

3. Once logged in, the hospital can manage it patient population throughout the process. No further uploads, downloads, or file transfers are required.

MAIN SCREEN

Once logged in, the hospital will see the main "Patient" screen. They will see patients from only their hospital. (NOTE: the examples used in this draft of the User Guide are from a State ESF 8 account which has a view of all hospital patients).

At this point, the hospital can choose "CHOOSE ACTION -> Download/Upload -> Download Patient Template:

Downloading the patient list template
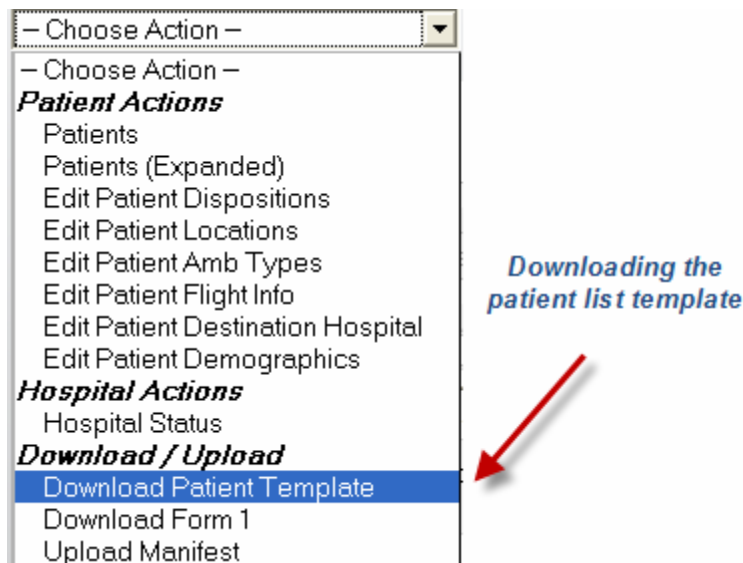
DOWNLOADING THE PATIENT TEMPLATE

This will bring the user to the following page:
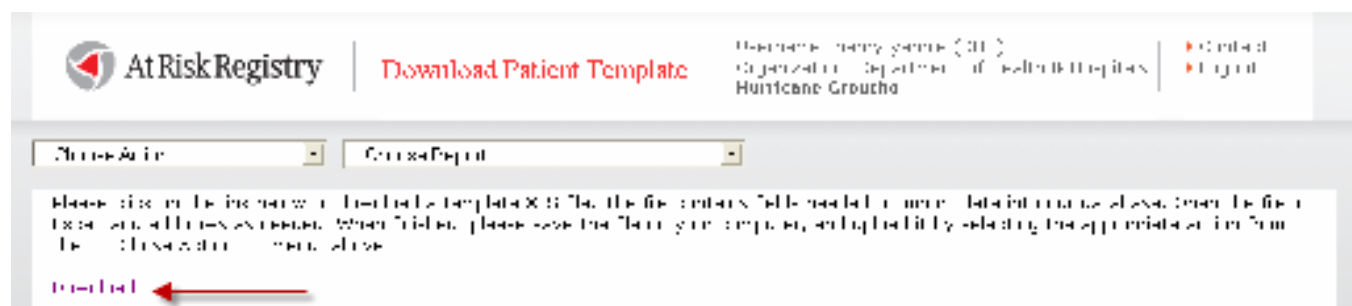
Clickng the "Download" link will open the following dialogue box and ask the user to save the template file to the users PC and can be opened in Excel:
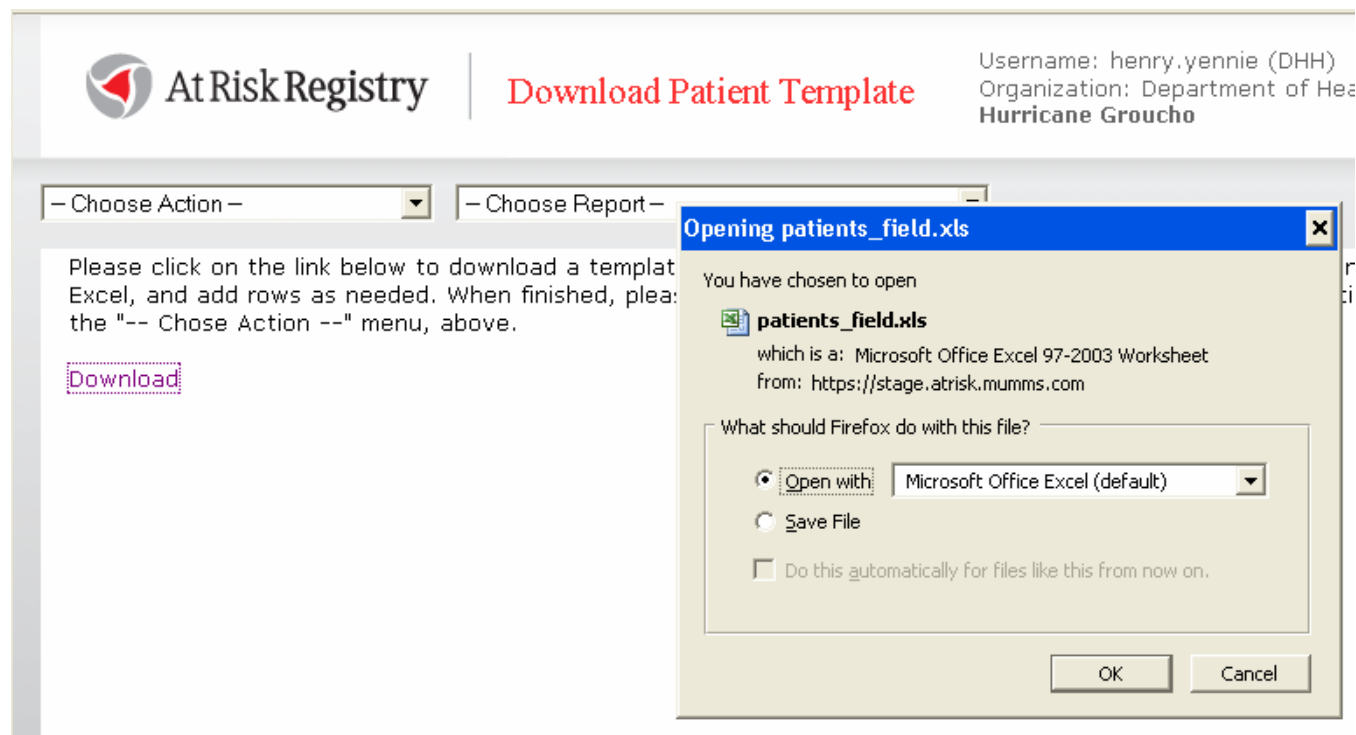

Once the file is downloaded, hospitals can copy/paste data into appropriate columns, or hand key the data into the spreadsheet. If a hospital can create a file from the primary hospital system, that data can be copied/pasted into the template, or directly uploaded into the At Risk program.
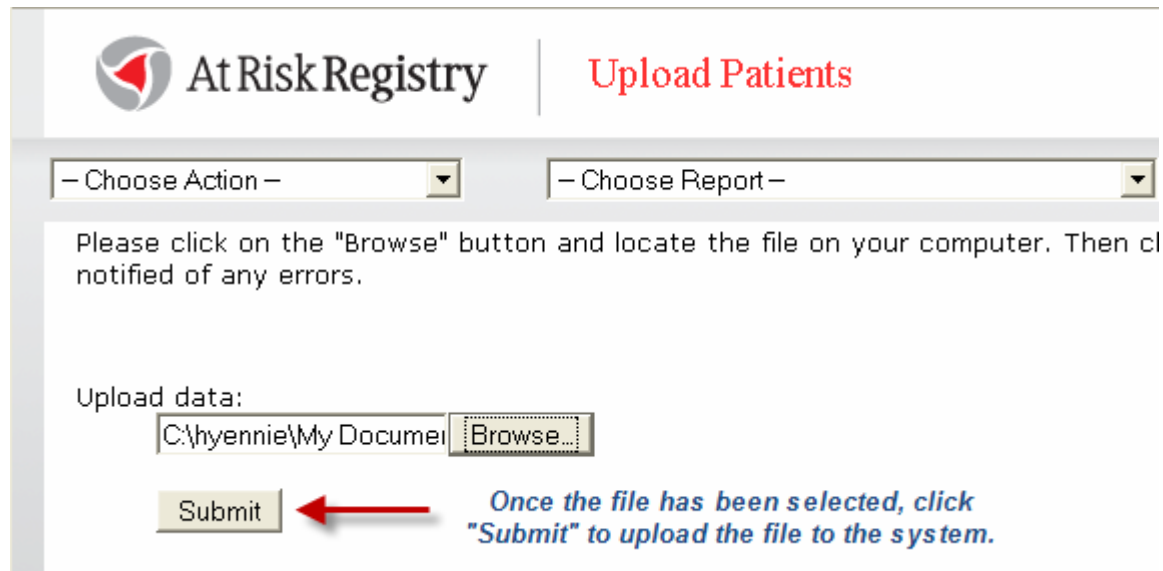
UPLOADING THE COMPLETED PATIENT FILE

Once the patient listing is ready it can be uploaded into the program by going to the "CHOOSE ACTION" menu and selecting the "Download / Upload -> Upload Patient" option:
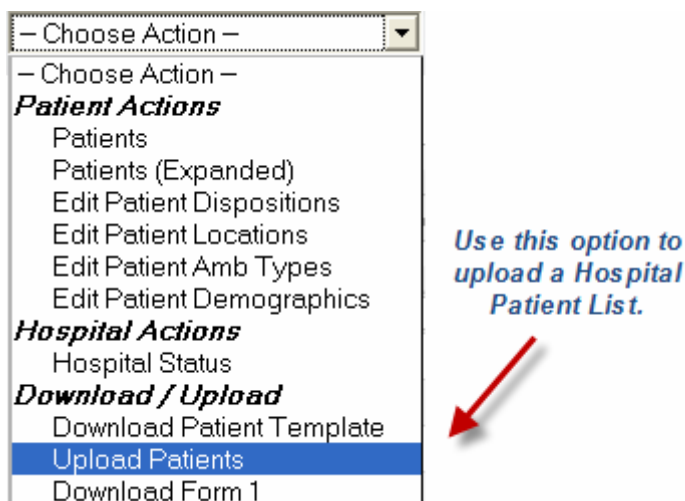
This option will bring you to the following page:
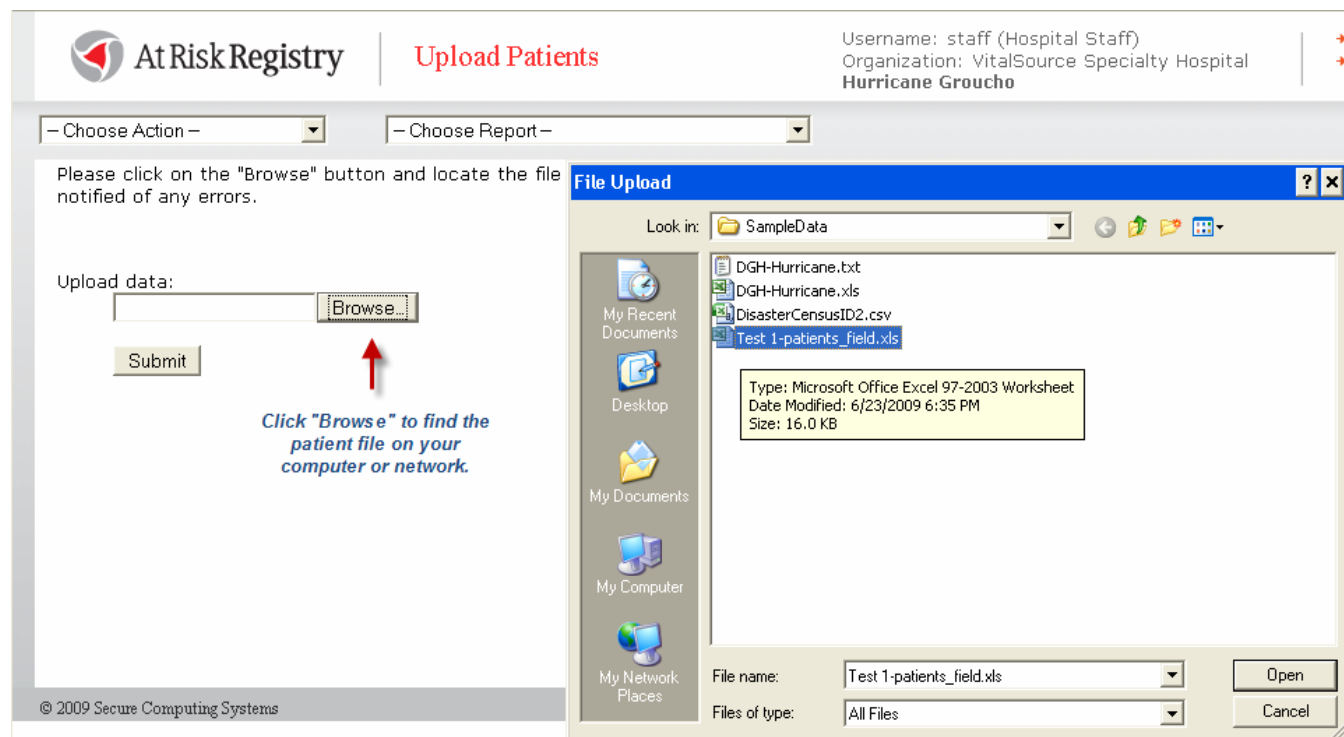
Once you've located the file on your computer or network, click the "Submit" button to upload the patient list:

Once this is done, you will see the following screen:

THE FINAL STEP

Once the hospital has completed any changes to its patient list and believes it is in its final state, the hospital indicates that their patient list is complete and ready for DRC review. This is done through the "Choose Action" menu: **CHOOSE ACTION –> Hospital Actions -> Hospital Status**
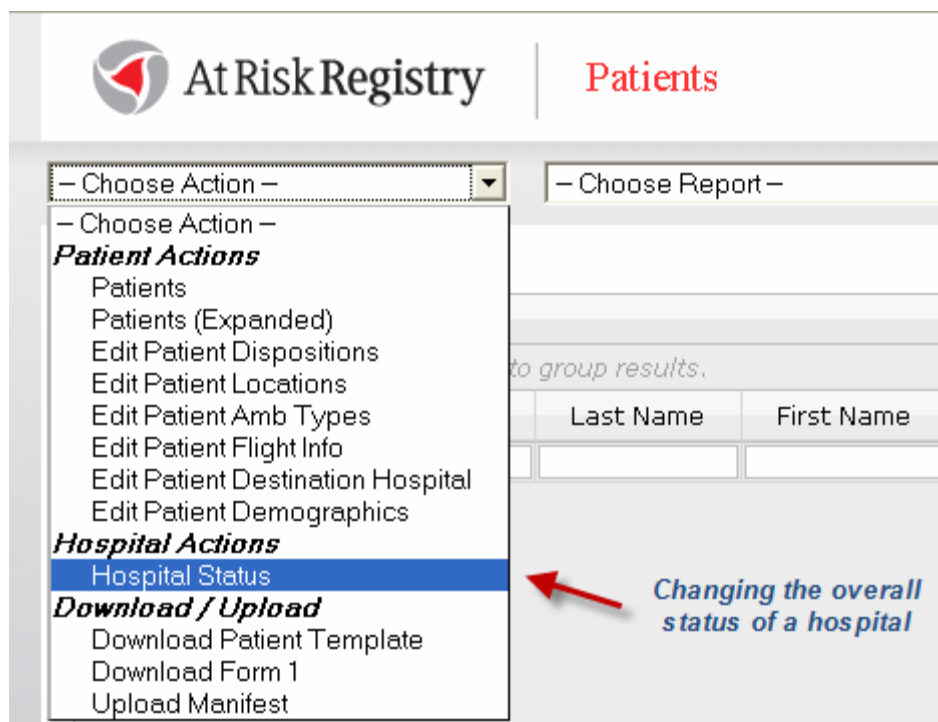
The next screen displays a recap of patients per disposition status. To indicate that all patient data and disposition status is correct click the STATUS field to indicate that your patient listing in ready. Be sure to click POST to save the information.
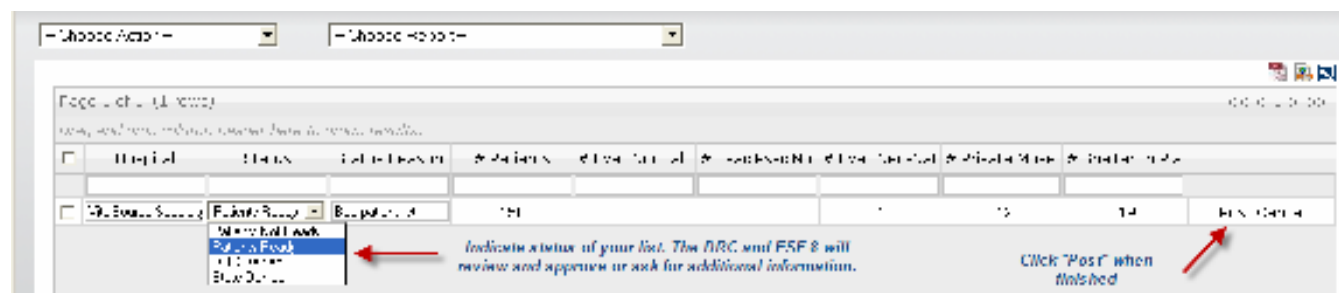
If patient listing or patient disposition status changes after indicating the list is ready, the hospital can continue to make changes as needed. When doing so, their patient listing status will change from "Patients Ready" to "Hospital Made Changes".

One of the final steps before submission to the GPMRC team is the review of the hospital's patient list by the DRC. This list contains each hospital in their region, and a count of patients in each disposition. Also an indicator that the hospital confirms whether or not their patient list is ready. If applicable, the DRC sees an indicator that changes have been made so that the DRC can review the changes, potentially make edits, and then ultimately accept the list. This will then notify the State ESF 8 team that the lists can be converted into the formats required for submission to GPMRC.

FOLLOWING UP

The hard part's done! The hospital now has the following options:

1. Correcting errors that may have occurred during the upload process.
2. Adding new patients as they may be admitted after the upload.
3. Modifying the status and disposition of patients as these items change or as the hospital's situation changes.
4. Continuing to monitor their patients as they move through the evacuation and re-patriation process.

These options are easily accessed on every page through either the "Choose Action" or "Choose Report" drop downs:

– Choose Action – ▼		– Choose Report – ▼	
– Choose Action –		– Choose Report –	
Patient Actions		All Form Types	
Patients		AMP Activity	
Patients (Expanded)		AMP Pre-Storm Report	
Edit Patient Dispositions		Detailed Form 1, 2, and 3 reports	
Edit Patient Locations		DRC/AMP Request Hospital/Pre-Storm Report	
Edit Patient Amb Types	**Actions Menu**	EMS Dispatch Report (AMP)	
Edit Patient Flight Info		EMS Dispatch Report (Parish)	
Edit Patient Destination Hospital		Form 1 Summary Report	
Edit Patient Demographics		Form 2 Summary Report	**Reporting Menu**
Hospital Actions		Form 3 Summary Report	
Hospital Status		Hospital Post-Evac Report	
Download / Upload		Patients Evac'ed by H-Hour (Form 1)	
Download Patient Template		Patient Evac Report	
Download Form 1		Post-Storm – Evacs Completed	
Upload Manifest		Post-Storm – Evacs in Progress	
		Pre-Storm – Evacs Completed	
		Pre-Storm – Evacs in Progress	
		Pre-Storm Summary report	

NOTE: Many of the reports are not completely developed at this time.

APPLICATION CONVENTIONS

As seen in the screen shots above the movement within the application is very simple – through the "Choose Action" or "Choose Report" drop down lists that appear on every page.

The patient editing and viewing options are powerful and generally work the same way on all pages in the application:

1. In any patient listing view, you can generally double-click in a data cell. This causes the entire row of data for that patient to be editable. The data elements that appear are dependent on the patient view you have chosen:

	Disposition	Hospital	Last Name	First Name	Gender	PMR Remarks	
☐		West Calcasieu Cameron Hospital	Hart	Johnathan		0	Edit Delete
☐	Evac Normal ▾	Christus St. Patrick Hospital	USIE	BEBE	Female ▾	195	Post Cancel
☐	Evac Normal	Jennings American Legion Hospital	New	Patient	Male / Female	0	Edit Delete
☐	Evac Normal	Christus St. Patrick Hospital	MCCLOSKEY	JOHN	Male	230	Edit Delete

Double-clicking in any field allows you to edit the record for that patient.

Depending on the data item, you can type in text or choose options from drop-down boxes.

Once you have completed your edits, you must always click the "Post" link for the changes to take effect:

Page 1 of 29. (289 rows)				<< < 1 2 3 4 5 6 7 8 9 10 11 > >>			
Drag and drop column header here to group results.							
☐ Disposition	Hospital	Last Name	First Name	Gender	PMR Remarks		
☐	West Calcasieu Cameron Hospital	Hart	Johnathan		0	Edit Delete	
☐ Evac Normal ▾	Christus St. Patrick Hospital	USIE	BEBE	Female ▾	195	Post Cancel	
☐ Evac Normal / Evac Neo-Nate / Evac Psych / Private Movement / Shelter In Place	Jennings American Legion Hospital	New	Patient		0	Edit Delete	
☐	Christus St. Patrick Hospital	MCCLOSKEY	JOHN	Male	230	Edit Delete	
	Christus St. Patrick						

Once changes are made, click "Post" to add the changes to the database

2. Edits to a patient record can also be made by scrolling to the right of the display and clicking the "Edit" link.

You can also use these links to delete the patient record.

3. Generally in any patient view, the list (or view) can be grouped by a particular data column that might be of interest:

In this example, we organized the view by the Arrival Airport. These allow quick modifications of the data display simply by dragging and dropping columns where indicated.

Following are some screen shots associated with various "Choose Action" options:

Drag and drop column header here to group results.

Last Name	First Name	Hospital ID	Gender	Modified	Weight	Weight Units	DOB	Ventilator Depe	Car
Hart	Johnathan			2009-06-17 08:27:06	0		1999-11-30 00:00:00	☐	
USIE	BEBE	9522	Female	2009-06-03 12:29:27	195		1999-11-30 00:00:00	☐	
New	Patient	mr_num		2009-06-03 10:03:46	0			☐	
MCCLOSKEY	JOHN	8351	Male	2009-06-03 12:51:54	230		1999-11-30 00:00:00	☐	

– Choose Action – ▼

– Choose Action –
Patient Actions
  Patients
  Patients (Expanded)
  Edit Patient Dispositions
  Edit Patient Locations
  Edit Patient Amb Types
  Edit Patient Flight Info
  Edit Patient Destination Hospital
  Edit Patient Demographics
Hospital Actions
  Hospital Status
Download / Upload
  Download Patient Template
  Download Form 1
  Upload Manifest

Moving to an expanded patient view

Drag and drop column header here to group results.

Cardiac Monitor	Other Elec. Dev	Space Type	Contingency M	Emergency Cor	Emergency Cor	Emergency Cor	CCATT	Diagnosis
☐							☐	
☐		litter	MC/Pediatrics	3375275770			☐	DIVERTICULITI
☐							☐	
☐		litter	MC/Pediatrics	3374748257			☐	

Departure Airp	Arrival Airport	Tail Number	Departure Time	Arrival Time	Dest. Hospital	Dest Hospital	Address Line 1	Address Line 2
KCWF	KLIT	ALW78666C15	6/3/09 1700Z/1200L	6/3/98 1915Z/1515L				
KCWF	KLIT	ALW78666C15	6/3/09 1700Z/1200L	6/3/98 1915Z/1515L				
KCWF	KLIT	ALW78666C15	6/3/09 1700Z/1200L	6/3/98 1915Z/1515L				

Indicating a plan for a patient

Dispositions can be changed as the conditions warrant.

Tracking ambulance assets at the AMP

Editing patient flight information

This data can be auto-populated through the upload of the GPMRC manifests. It can also be entered at the AMP if manifests aren't received in time.

CONCLUDING THE SESSION

All users are encouraged to use the "Logout" link to ensure that their session is properly terminated.

Username: henry.yennie (DHH)   → Contact
Organization: Department of Health & Hospitals   → Logout
Hurricane Groucho

Use the "Logout" link to terminate your session.

THE FUTURE

Following is the current near term plan:

1. For this 2009 hurricane season:
   a. Ensure that the application has the basic functionality required to support hospital evacuations using the GPMRC system. This includes the development of a basic suite of reports.
   b. Provide basic training to all hospitals in the southern coastal risk areas so that in case of an event this year, these vulnerable facilities have a working knowledge of the application.
   c. Continue to test the application with other partners, including GMPRC, the FCCs and interested NDMS hospitals in receiving states.
2. After this 2009 hurricane season:
   a. Continue to develop the application and associated reports and views
   b. Explore tighter integration with hospital systems to further automate the patient list production and upload process
   c. Explore tighter integration with GPMRC systems to avoid manual file hand-offs and uploads of manifests.
   d. Continued training of hospitals throughout the state and in receiving states.